

SVIATOSLAVOV, Nikolay Ivanovich; kand.tekhn.nauk; BELYAYEV, Boris  
Aleksseyevich; KOKORIN, V.V., retsenzent; KRYUKOV, V.M.,  
spetsred.; ORLOVA, L.A., red.; KNAKNIN, M.T., tekhn.red.

[Cotton opening and picking equipment] Razrykhlitel'no-  
trepal'nyi agregat dlia khlopka. Moskva, Gos.nauchno-tekhn.  
izd-vo lit-ry po legkoi promyshl., 1959. 130 p. (MIRA 13:3)

1. Glavnyy konstruktor zavoda Kuztekstil'mash.(for Belyayev).  
(Cotton machinery)

VLADIMIROV, Boris Mikhaylovich, doktor tekhn.nauk; LEVITSKIY, I.K., inzh.,  
retsenzent; SVYATOSLAVOV, N.I., kand.tekhn.nauk, retsenzent;  
KOPELEVICH, Ye.I., red.; KOGAN, V.V., tekhn.red.

[Analysis of operation processes on opener-picker machines]  
Analiz protsessa na mashinakh razrykhlitel'no-trepal'nogo agre-  
gata. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po legkoi pro-  
myshl., 1959. 175 p. (MIRA 12:10)  
(Cotton machinery)

SVYATOSLAVOV, N.I.

The UOA waste-cleaning machine. Biul.tekh.-ekon.inform. no.12:  
43-44 '59. (MIRA 13:4)  
(Textile machinery)

SVYATOSLAVOV, V.K.

PLATE 1 BOOK EXPLOITATION SOV/3559

Al'meniya nauk SSSR. Institut metallurgii. Nauchnyy sovet po probleme zharno-prochnykh splavov

Izvedeniya po zharnoprochnykh splavam, t. 5 (Investigations of Heat-Resistant Alloys, Vol. 5) Moscow, Izdatvo AN SSSR, 1955. 423 p. Printed ally inserted. 2,000 copies printed.

Ed. of Publishing House: V.A. Kiselev; Tech. Ed.: I.P. Kuz'min; Editorial Board: I.P. Bardin, Academician, G.V. Kurdyumov, Academician, M.V. Agreter, Corresponding Member, USSR Academy of Sciences (Resp. Ed.), I.A. Odling, I.M. Pavlov, and I.P. Radin, Candidate of Technical Sciences.

PURPOSE: This book is intended for metallurgical engineers, research workers in metallurgy, and may also be of interest to students of advanced courses in metallurgy.

CONTENTS: This book, consisting of a number of papers, deals with the properties of heat-resistant metals and alloys. Each of the papers is devoted to the study of the factors which affect the properties and behavior of metals. The effects of various elements such as C, Mn, and Ni on the heat-resistant properties of various alloys are studied. Deformability and variability of certain metals as related to the thermal conditions are the object of another study described. The problems of hydrogen embrittlement, diffusion and the deposition of ceramic coatings are described. The apparatus and methods electrochemicals are described. The properties of various alloys are critically examined and evaluated. Results are given of studies of intermetallic bonds and the behavior of stress in metal. Tests of turbine and compressor blades are described. No personalities are mentioned. References accompany most of the articles.

Lankovskiy, K.A., B.M. Kiryev, and K.N. Gorbakova. XI 756 Austenitic Steel	19
Rimushin, P.P., Z.A. Shadrakova, G.Ya. Moskalenko, M.A. Kozhich, and B.A. Kuz'min. XI 756 and XI 758 Heat-Resistant Chromium-Nickel-Titanium Steel	25
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Sklyarov, M.M., A.A. Platonov, E.N. Radetskaya, and L.K. Shladkov. The Effect of Thermal Stresses on Short-Time, Long-Time, and Vibration Strength of Alloys	39
Tereshkov, K.I. Acceleration of Aging Cycles of XI 481 Heat-Resistant Austenitic Steel	42
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Leris, M.B., B.M. Pivnitskiy, V.S. Kuliyev, and B.E. Lyubimov. Structure and Properties of Nickel Alloys Under the Long-Time Action of High Temperature	90
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Kozlov, M.I., and V.A. Pavlov. Study of Fine Structures of Aluminum-Magnesium and Copper-Nickel Solid Solutions	131
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16813

S/137/62/000/004/106/201  
A052/A101

18.8.200  
AUTHORS: Laguntsov, I. N., Svyatoslavov, V. K.

TITLE: The effect of a complex-stressed state and the steam medium on the long-time strength of pipes

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 4, 1962, 36, abstract 4I206 (V sb. "Ekspluatats. nadezhnost' metalla parosilovyykh ustanovok". Moscow-Leningrad, Gosenergoizdat, 1959, 62-75)

TEXT: The results of comparative long-time strength tests of austenite heat-resisting 1X13H18B2B (EI695) [1Kh13N18V2B (EI695)] steel in a monoaxial and complex-stressed state are reported. The long-time strength of pipes in a complex-stressed state was determined on a special installation permitting the test of steam superheating pipes (32 x 5.5 mm) under the pressure of steam coming inside the pipe from a high-parameter boiler with initial parameters 300 at at 600°C. The layout of the installation is presented. The testing temperature of EI695 steel was 700°C. The long-time strength of steel at monoaxial tension was determined on ИП-2 (IP-2) machines. Various previously suggested relations for determining the ultimate long-time strength are analyzed. It is shown that

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The effect of a complex-stressed ...

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for the strength calculations of pipes of boiler installations it is expedient to use the formula based on the third theory of strength

$$\sigma = (1/200) \cdot [(\beta + 1)/(\beta - 1)] \cdot p$$

where  $\beta$  is the ratio of the external diameter of the pipe to its internal diameter and  $p$  is the internal pressure. The long-time strength of samples tested under conditions of a complex-stressed state is noticeably lower than the long-time strength obtained when testing the same material under conditions of monoaxial tension. Depending on testing conditions (wall thickness, duration) various kinds of failures occur: along the grain, intergrain and mixed ones. A metallographic investigation has shown that there are cracks both on the inside and outside surfaces of pipes. There are 10 references.

Z. Fridman

[Abstracter's note: Complete translation]

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SOV/96-59-7-12/26

AUTHORS: Laguntsov, I.N., Candidate of Technical Sciences, and  
Svyatoslavov, V.K., Engineer

TITLE: Long-term Strength Tests on Super-heater Tubes of Steel  
12-KhMF (Ispytaniye paroperegrevatel'nykh trub iz stali  
12KhMF na dlitel'nuyu prochnost')

PERIODICAL: Teploenergetika, 1959, Nr 7, pp 55-59 (USSR)

ABSTRACT: Boiler materials are often selected by laboratory tensile tests, although in service the components are subject to complex stressing. This article gives comparative long-term strength test data on super-heater tubes made of steel grade 12KhMF with both simple tension and complex stressing. The nominal outside and inside diameters were 32 and 20 mm. The steel analysis is as follows: C = 0.11%; Mn = 0.56%; Si = 0.27%; Cr = 1.11%; Mo = 0.35%; V = 0.22%; S = 0.023%; P = 0.019%. The heat-treatment of the tubes is described; the structure is of pearlite and ferrite. Mechanical test results are given and it is claimed that the steel meets existing technical requirements. Two types of tests were made on tubes; stressing by internal steam pressure and ordinary tests in simple tension. A special test rig

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## Long-term Strength Tests on Super-heater Tubes of Steel 12-KhMF

was built, steam being obtained from a main steam pipe at a pressure of about 300 atm. Continuous steam flow through the specimens was not used but they were blown through three times a day so that the steam was active and corrosion products were removed. The tubes were heated in a vertical muffle furnace. The temperature control and measuring arrangements are described. The specimens were 250 mm long and were carefully selected for size and concentricity. The stresses applied during the tests with internal pressure were from 11.5 to 19 kg/mm<sup>2</sup>. The stresses acting on the tube wall were varied by altering the wall thickness from 1.8 to 3.1 mm. The test temperature was 590°C, maintained for periods of 3 000 - 4 000 hours. At the same time similar tubes were tested in simple tension, at the same temperature with tensile stresses ranging from 15 to 25 kg/mm<sup>2</sup>; the shape and dimensions of these specimens are shown in Figure 1. The Creep curves under tensile stress are shown in Figure 2. The results of long-term strength tests are tabulated, and plotted in Figure 3. This graph includes results from two different batches of steel and indicates good agreement between the results of tensile tests on cylindrical and tubular specimens. Data obtained during long-term tests on tubes with internal pressure are given in Table 1. Corresponding stress values

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## Long-term Strength Tests on Super-heater Tubes of Steel 12-KhMF

calculated by different formulae (1) (2) and (3) are given in Table 2. The appearance of a specimen that has failed after a long time is shown in Figure 4. Test results on tubular specimens with internal steam pressure are plotted in Figure 5, which includes for comparison the results of tensile tests on the same tubes. It will be seen that when plotted on double logarithmic paper the experimental points fall on straight lines; evidently the stress-time relationship is of the same kind in both tensile and internal pressure tests and can be represented by an equation of the type of (4). If the stresses are calculated by equation (1) the experimental points corresponding to tube failure as a result of internal pressure are such that the coefficient B in equation (4) is 20% less than the corresponding figure for tensile tests. If formula (2) is used the coefficient B is 10 - 12% less than in tensile tests. This difference is attributed to the corrosive influence of steam on the specimen. Metallographic investigation of the specimens tested with internal steam pressure showed that the pearlite structure had been somewhat altered. On the internal surface fine cracks

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SOV/96-59-7-12/26

Long-term Strength Tests on Super-heater Tubes of Steel 12-KhMF

were found along the grain boundaries and are attributed to corrosion by the steam. It is concluded that the difference between plain tensile and internal pressure tests should be allowed for in practical calculations. There are 5 figures, 2 tables and 5 references, 3 of which are Soviet and 2 German.

ASSOCIATION: Vsesoyuznyy teplotekhnicheskii institut (All-Union Thermo-Technical Institute)

Card 4/4

SVYATOSLAVOV, V. K., Cand Tech Sci — (diss) "Investigation of the lasting durability of superheated steam pipes at various pressures in a steam environment," Moscow, 1960, 12 pp (Moscow Higher Technical School imeni N. B. Bauman)  
(NL, 40-60, 123)

SVYATOSLAVSKAYA, T.N.; ZALETSKIY, V.N.; RYZHOVA, M.S., red.; YUROV,  
E.M., tekhn.red.

[Increasing the productivity of belt dryers; practices of the  
Gryazi Food Concentrates Combine] Uvelichenie proizvoditel'nosti  
lentochnykh sushilok; iz opyta raboty Griazinskogo kombinata  
pishchevykh kontsentratorov. Moskva, Pishchepromizdat, 1956. 17 p.  
(MIRA 12:5)

(Gryazi--Food, Concentrated--Drying)

PATRUNOV, F.G., inzh.; ~~SVYATOSLAVSKIY~~, V.A., inzh.; MAZIYA, L.V., inzh.

Study of a generator-motor system with an exciter and amplidyne.  
Vest.elektroprom. 33 no.12:36-40 D '62. (MIRA 15:12)  
(Electric machinery)

SVYATOSLAVSKIY, V.A., inzh.

Application of the principle of the maximum in the calculation of  
optimum control of d.c. motors with independent excitation.  
Elektrichestvo no.9:10-15 S '63. (MIRA 16:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut elektromekhaniki.

VORONETSKIY, B.B., kand. tekhn. nauk; SVYATOSLAVSKIY, V.A., inzh.

Optimum modes of operation of the main drive of a blooming mill.  
Elektrichestvo no.7:24-28 J1 '64. (MIRA 17:11)

1. VNIIElektroprivod.

SVYATOSLAVSKIY, V.A., inzh. (Moskva)

Synthesis of systems for optimal control of d.c. drives. Elektri-  
chestvo no.8:26-29 Ag '65. (MIRA 18:9)



L 57505-65 EMT(m)/EMP(i)/EMP(t)/EMP(b)/EMA(h)  
ACCESSION NR: AR5013012

Feb 30  
UR/0137/65/000/064/E048/E048  
621.791.75.042

2/  
B

SOURCE: Ref. zh. Metallurgiya, Abs. 4E302

AUTHOR: Svyatov, V. A.; Cherevko, V. A.

TITLE: Use of ultrasound to intensify the process of cleaning welding rod

CITED SOURCE: Sb. Primeneniye ul'trazvuka v mashinostr. Minsk, Nauka i tekhnika, 1964, 149-150

TOPIC TAGS: ultrasound, welding rod

TRANSLATION: The Novokramatorsk Machine Building Plant has introduced equipment and technology for cleaning welding wire with the use of ultrasonic oscillations. The method and equipment were developed by associates of the Ultrasound Laboratory of Scientific Research Institute of the Heavy Machine Building Industry. Wire operations: pickling in an ultrasonic field, washing in running water, passivation, drying with heated air. V. Pomenko.

ENCL: 00

SUB CODE: 1E, GP  
Card 1/1 232

SVYATOSHENKO, A.T.

Capillary chromatography of technical vinylcyclohexane. Nefte-  
khimiia 4 no.1: 151-155 Ja-P'64 (MIRA 17:6)

1. Institut neftekhimicheskogo sinteza AN SSSR imeni A.V.  
Topchiyeva.

SVIATOV, G., inzh. kapitan-leytenant

Automation on a combatant ship. Voenn. znan. 40 no.12:36-37  
D 62 (MIRA 18:1)

SVYATOV, G., inzh.-kapitan 3 ranga

Way into the depths. Voen. znan. 42 no.2:36-37 F '66.  
(MIRA 19:1)

STREL'TSOV, V.V.; GVOZDEV, V.D.; SVYATOV, V.M.

Operation of a pneumatic feeder. Izv.vys.uch.zav.; khim.i  
khim.tekh. 5 no.4:659-665 '62. (MIRA 15:12)

1. Ivanovskiy khimiko-tekhnologicheskii institut, kafedra  
khimicheskogo mashinostroyeniya.  
(Pneumatic conveying)

GVOZDEV, V. D.; SVYATOV, V. M.; KRASOTKINA, T. A.

Drying of thin sheet fiber in a fluidized bed of an inert granular material. Izv. vys. ucheb. zav.; khim. i khim. tekhn. 5 no.5:832-839 '62. (MIRA 16:1)

1. Ivanovskiy khimiko-tekhnologicheskii institut, kafedra khimicheskogo mashinostroyeniya.

(Fibers—Drying) (Fluidization)

EPSHTEYN, M.I.; SVYATOVA, L.Ye.

Measuring the absolute yield of luminophors. Prib. i tekhn. eksp.  
8 no.5:186-189 S-O '63. (MIRA 16:12)

1. Moskovskiy elektrolampovyy zavod.

SVYATOVA, M.S. (Novosibirsk, pr.Dzerzhinskogo, d.40, kv.32)

Perforative cyst of the pancreas. Klin.khir. no.8:78-79 J1 '62.  
(MIRA 15:11)

1. Khirurgicheskoye otdeleniye Novosibirskoy gorodskoy  
bol'nitsy No.2.

(PANCREATIC CYSTS)



SVYATOVETS, G. D., CAND VET SCI, "EXCRETORY FUNCTION OF  
THE PANCREAS IN HEALTHY YOUNG <sup>hogs</sup> ~~PIGS~~ AND THOSE <sup>affected with</sup> ~~SUFFERING FROM~~  
CATARRHAL GASTROENTERITIS." KHAR'KOV, 1961. (MIN OF AGR  
UKSSR, KHAR'KOV ZOOVETERINARY INST). (KL, 3-61, 227).

*SVYATSKAYA VIRGIN*

AFANAS'YEV, A.L., kand. biol. nauk; ~~SVYATSKAYA, L.N.~~

Microbiological processes in virgin and idle lands tilled by different methods. Agrobiologia no.1:86-92 Ja-F '58. (MIRA 11:2)

1. Sibirskiy nauchno-issledovatel'skiy institut sel'skogo khozyaystva, g. Omsk.

(Tillage) (Soils--Bacteriology)

SVYATSKAYA, M.G.; ANDREYEVA, M.F.; SHALYGINA, V.T.

Clarification of slime waters. Sbor.DonUGI no.22:121-128 '61.  
(MIRA 15:6)

(Coal preparation plants--Equipment and supplies)

OFENGENDEN, N.Ye.; SVYATSKAYA, M.T.; ANDREIEVA, M.F.

Crushing of coal caused by hydraulic mining and conveying. Sbor.-  
DonUGI no.22:69-90 '61. (MIRA 15:6)  
(Hydraulic mining)

I. 22133-65 RH	EEC-4/EEC(k)-2/EWA(n)/EWT(d)/EWT(1)	Pg 4/Pk-4/Pl-4/Po-4/Pq-4/Peb S/0302/64/000/004/0045/0047	ASDA-5
ACCESSION NR: AP5001743			
AUTHOR: <u>Luchenitser, I. A.; Mochalova, V. S.; Fridshtand, D. A.; Shchedrov, N. I.</u>		<u>Svyatskaya, N. V.;</u>	
TITLE: <u>Digital-indicator-type measuring instrument operating on demand</u>			
SOURCE: <u>Avtomatika i priborostroyeniye, no. 4, 1964, 45-47</u>			
TOPIC TAGS: <u>measuring instrument, digital measuring instrument</u> 10			
ABSTRACT: The blueprint of a 12-parameter (selected out of 600) measuring instrument is described. The instrument comprises two principal parts: (a) a switch panel with pushbuttons, relays, and a supply unit and (b) a digital instrument panel with digital converters and indicators. Three pulse generators with 100, 80, and 60 kc are provided. These characteristics are expected: time of digital conversion of one parameter, 10 msec; time of serving 12 channels, 2 sec; maximum error, 1.1%. A "laboratory hookup for two channels was stable			
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L 22133-65

ACCESSION NR: AP5001743

in operation." Orig. art. has: 2 figures.

ASSOCIATION: Institut avtomatiki Goskomiteta po priborostroyeniyu Gosplana  
SSSR (Institute of Automation, State Committee on Measuring Instruments,  
Gosplan SSSR)

SUBMITTED: 00

ENCL: 00

SUB CODE: IE

NO REF SOV: 000

OTHER: 000

Cord 2/2

LUCHENITSKY, I.A.; MOCHALOVA, V.S.; SVYATSKAYA, N.V.; FRIDSHTAND, D.A.;  
SHCHEDROV, N.I.

Device for triggered measurements with digital reproduction. Avt.  
1 prib. no.4:45-47 O-D '64 (MIRA 18:2)

SVYATSKIY, A. M.

Cand. Med. Sci.

Dissertation: "Organization of Medical Treatment in the Sanatorium under  
Conditions of Kislovodsk."

20/2/50

Moscow Medical Inst., Ministry of Health of the RSFSR

SO Vechervaya Moskva  
Sum 71



USSR/ Miscellaneous

Card 1/1      Pub. 89 - 13/40

Authors       : Svyatskiy, B.

Title          : A manager of a Kolkhoz radio center (rural radio-relay station)

Periodical    : Radio 10, page 19, Oct 1954

Abstract      : An appraisal is made of the work of the Kolkhoz radio-center manager in the village of Khoroshevo, Kuntsev District, Moscow Region. The manager is praised for his technical skill and administrative talent. The article is of local interest.

Institution:   .....

Submitted:    .....

SVYATSKIY, D.O.

Essays on the history of astronomy in ancient Russia. Part 1.

Ist.-astron.issl. no.7:73-128 '61.

(MIRA 14:9)

(Astronomy, Russian)

SVYATSKIY, D.O.

Essays on the history of astronomy in ancient Russia. Part 2,  
Ist.-astron.issl. no.8:11-82 '62. (MIRA 16:3)  
(Astronomy—History)

SVYATSKIY, I. YA,

PLUTAVIN, B.A., inzhener; SVYATSKIY, I.Ya., tekhnik.

Improvement of the window sill air intake ventilation device used in the  
tall building of the Moscow State University. Rats.i izobr.predl.v stroi.  
no.73:21-24 '54. (MIRA 7:6)  
(Ventilation)

SVYATSKIY, P.S., inzh.

Inlaid wooden parquet. Biul. tekhn. inform. 4 no.1:23-25 Ja '58.  
(Parquet floors) (MIRA 11:2)

GOELAND, Sh.N., kand.tekhn.nauk; LEBENTSOV, N.M., inzh.; NIKOLAYEV, A.S., inzh.; PAVLENKO, V.T., inzh.; PLAKIDA, M.A., kand.tekhn.nauk; PORADNYA, A.I., doktor tekhn.nauk; SPIRIDONOVA, O.M., kand.tekhn.nauk; SVYATSKIY, P.S., inzh.; FEDORTSOV, B.D., inzh., retsenzent; PUL'KINA, Ye.A., tekhn.red.

[Manual on finishing operations] Spravochnik po otdelochnym rabotam. Pod red. A.I.Poradnia i O.M.Spiridonovoi. Leningrad, Gos.izd-vo lit-ry po stroit., arkhitekt. i stroit.materialam, 1960. 497 p. (MIRA 14:4)

1. Leningrad. Glavnoye stroitel'noye upravleniye.  
(Finishes and finishing)

SVYATSKIY, Pavel Stanislavovich, inzh.; YARMOLOVICH, Konstantin Yulianovich, inzh.; SMIRNOV, N.A., prof., red.; FOMICHEV, A.G., red. izd-va; BELOGUROVA, I.A., tekhn. red.

[Methods of overall mechanization of the basic types of finishing work] Puti kompleksnoi mekhanizatsii osnovnykh vidov otdelochnykh rabot. Pod obshchei red. N.A.Smirnova. Leningrad, Leningr. dom nauchno-tekhn. propagandy, 1961. 20 p. (Bibliotekha stroitel'stva po mekhanizatsii i avtomatizatsii stroitel'stva, no.14) (MIRA 15:7)

(Building--Details)

SVYATSKIY, Z.M., kand.tekhn.nauk; MAYEV, V.A., inzh.

Results of studying the combustion chamber of the GT-700-4 gas turbine system operating on natural gas. Energomashinostroenie  
9 no.11:8-10 N '63. (MIRA 17:2)



STORozhuk, Ya.P., kand, tekhn. nauk; SVYATSKIY, Z.M., kand. tekhn. nauk

Burning fuel oil in the combustion chamber of gas-turbine  
installations. Energomashinostroenie 4 no.10:24-28 0 '58.  
(Gas turbines) (MIRA 11:11)

SVYATSKIY, Z.M.

96-3-5/26

AUTHOR: Paleyev, I.I. (Dr.Tech.Sci.) & Svyatskiy, Z.M. (Cand.Tech.Sci.)  
 TITLE: The aerodynamics of multi-register combustion chambers.  
 (Aerodinamika mnogoregistrovykh kamer sgoraniya)  
 PERIODICAL: Teploenergetika, 1958, Vol.5. No.3. pp. 16-20 (USSR)  
 ABSTRACT: Modern combustion chambers are subject to high thermal loading which can only be achieved by efficient mixing of fuel and oxidant. A promising way of accomplishing this mixing is to instal a 'register' round each mozzle which sets up its own aerodynamic zone so that each burner can be considered as an independent fuel combustion unit. An analysis of the operation of a multi-register burner, showed that the combustion process is very efficient. The aerodynamics of a multi-register chamber were accordingly studied to obtain an understanding of the motion of flow in the chamber. The tests were carried out on a model chamber illustrated in Fig.1. The length of the measuring section from the registers to the exhaust is 2 metres, the internal diameter is 240 mm. The tests were made with four and five registers installed on a spherical disc at an angle of 23° to the horizontal. Each register contained four stamped blades set at an angle of 70° to the inlet air. Outlet air velocities were up to 50 metres/second. The fifth register, when used, was on the centre line. Velocity and pressure measurements were made by probes at positions given in the Table. Air that has passed through the

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The Aerodynamics of multi-register combustion chambers

98-3-5/26

registers acquires a spiral motion, centrifugal forces then set up the pressure field shown in Fig.2. Axial velocity distribution curves in dimensionless units at five places in the chamber are given in Fig.3. These curves show that near the registers each quadrant of the chamber acts as an independent register. The axial velocity is much lower in the central part of the common flow. The character of flow rotation in a multi-register chamber, beyond the second measuring point, is analogous with that of a single register chamber. Radial velocity curves at later sections of the chamber are given in Table 5. Test results obtained with a five register model chamber are then discussed. The method of measurement was the same as before. The pressure field at the section nearest the registers is shown in Fig.6. and here the influence of the central register is appreciable. The axial velocities are of particular interest and it is seen from Fig.7. that, at the first measuring section, the axial velocities have five inflections. Thus the flows from the different registers can be considered as independent. Reverse flows are small. Beyond the second measuring section the axial velocities are similar to those obtained with a four register chamber. The axial velocity gradient is, of course, most important for turbulent mixing and it is therefore advantageous to use a multi-register chamber with a central register. The conditions of mixing in a multi-register chamber are

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The aerodynamics of multi-register combustion chambers.

96-3-5/26

then analysed mathematically. An expression is given for the transfer equation and a similar equation can be written for heat exchange. Expressions are obtained for the co-efficient of turbulent diffusion and for the kinematic viscosity. This latter is determined only approximately. Nevertheless the turbulent exchange curves given in Fig.8. provide a comparative characteristic and show that in a multi-register chamber the exchange co-efficient is several times greater than in a single register chamber. A further advantage of the central register is that if need be it can be used alone at light loads. There are 8 figures.

ASSOCIATION: Central Boiler and Turbine Institute (Tsentral'nyy Kotloturbinnyy Institut).  
AVAILABLE: Library of Congress.

Card 3/3

SOV/96-58-6-6/24

AUTHOR: Svyatskiy, Z.M. Cand.Tech.Sci.

TITLE: Testing of a combined (liquid/gas) combustion chamber. (Ispytaniya kombinirovannoi kamery sgoraniya)

PERIODICAL: Teploenergetika, 1958, No.6. pp. 35-39 (USSR)

ABSTRACT: The combustion chamber tested is illustrated in fig.1. The body is made of sheet steel brand St 3; the telescopic flame tube comprises four sections made of sheet steel 1Kh18N9T 5mm thick. The fourth section contains the mixer, which is used to produce a uniform temperature field beyond the combustion chamber. This article considers flow in the swirler and a comparison is made of relative axial velocities in the combustion chamber. The latter was of full size and suitable for plane or conical swirlers. The swirler blade height was 70 mm. Two types of swirler were tested, a flat one with blades set at 45°, and a conical one with blades set at 55°. In the conical swirler, gas was delivered through half the spaces between the blades, and air through the rest. The swirlers, shown in fig.2. are intended for burning gas and liquid fuel separately or together. Liquid fuel was delivered through a nozzle at the centre of the swirler. Appropriate arrangements were made for measurement and observation. A liner was inserted between the flame tube and the frame, to increase the air speed over the outside of the flame tube. Four observation holes were made in the tube, one in each section.

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Testing of a combined (liquid/gas) combustion chamber. SOV/96-58-6-6/24

In ordinary combustion chambers with moderate values of Reynolds number, kinematic similarity is observed; the velocity components expressed in dimensionless units are independent of the chamber dimensions and rates of flow. Measurements were made in the swirler at  $\frac{1}{2}$  and  $\frac{2}{3}$  the blade height, as shown in fig.2. The static pressure distribution, and the tangential and angular velocities measured within the swirler, plotted in fig.3., show the relatively large pressure-drop in the swirler. The presence of reverse flow in the swirler promoted steadiness of the flame. There was also a marked increase in tangential velocity. Air and fuel flows are analysed. As the distance from the swirler increases the influence of the particular design of the air swirling parts diminishes, and only the total swirl is important. This is characterised by an integral parameter. The difference between the effects of flat and conical swirlers is described, and distributions of dimensionless axial velocities are plotted in fig.4. A formula is given for the resistance factors of full-size swirlers in respect of both air and gas. Both factors were 2.5 for the conical swirler. With about a quarter of the rated air flow and three-quarters of the rated gas flow, the total resistance of the combustion chamber was about  $1\frac{1}{2}$  with a conical swirler and about half this with a flat swirler. Gas from small coke or anthracite gasified under pressure was delivered to the chamber, cyclones being used to remove solids.

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Testing of a combined (liquid/gas) combustion chamber. SOV/96-58-6-6/24

The gas was at a temperature of 360-570°C and had a calorific value of 800-1000 kcal/m<sup>3</sup> (NTP). The air was heated to 225-290°C, and the pressure in the chamber was 3.1 - 3.8 atm. The air speed in the annular gap round the flame tube was 40-50 m/sec, which gave adequate cooling. With the flat swirler, mixing of gas and air took place in the chamber, and with the conical swirler in the swirler. At low loads, flames were seen along the conical swirler blades, and at high loads the flame was at the swirler outlet. The results given in fig.5. show that no products of incomplete combustion were found in later sections of the flame tube. Local coke deposits were occasionally observed, but combustion was always complete in the first section of the flame tube, despite the great range of calorific value of the gas. With great variations in loading, the conical swirler gave somewhat steadier operation than the flat one. Tests were made with gas oil with a calorific value of 9970 - 10000 kcal/kg, and specific gravity of 0.85. The air was heated to 115 - 260°C and the pressure in the chamber was 3.1 - 4.0 atm. Conical and plane swirlers were used and two-stage nozzles for fuel atomisation. Combustion was stable over a wide range of excess-air ration and, as shown in fig.6., combustion was complete in the first section of the tube. The thermal loading was 0.5 - 2.3 x 10<sup>6</sup> kcal/m<sup>2</sup>.hr.atm. and was limited by the available air supply.

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Testing of a combined (liquid/gas) combustion chamber SOV/96-58-6-6/24

Burning in the swirler was not observed, except when the fuel consumption was less than 40 kg/hr. With both types of swirler the efficiency of combustion of liquid fuel was of the order of 99%. Two types of mixer were used, one with nozzles and one with holes. The results given in fig.7. show that temperature distribution was uneven, principally because of over-cooling of the central part of the gas flow. When the nozzles were removed, leaving oval holes, conditions improved and the temperature field became uniform. The operation of the mixer can only be confirmed with full air flow, but in any case the temperature is uniform in the flow after the second bend in the pipe. It is concluded that combustion is stable and efficient with gas oil, diesel fuel and generator gas burned separately or together. Other gases of low calorific value, such as coke-oven gas, could probably be burned. There are 7 figures and 2 literature references (Soviet)

ASSOCIATION: Central Boiler Turbine Institute (Tsentral'nyy kotloturbinnyy institut)

1. Combustion chambers--Test methods
2. Fuels--Applications

Card 4/4



SOV/96-59-2-5/18

AUTHORS: Polyatskin, M.A., Candidate of Technical Sciences  
Svyatskiy, Z.M., Candidate of Technical Sciences

TITLE: A Highly Rated Gas Turbine Combustion Chamber for  
Medium and Heavy Liquid Fuels (Vysokoforsirovannaya  
kamera sgoraniya gtu.dlya srednikh i tyazhelykh  
zhidkikh topliv)

PERIODICAL: Teploenergetika, 1959, Nr 2, pp 33-39 (USSR)

ABSTRACT: This article gives the results of adjustment and  
investigation of a highly rated combustion chamber  
operating on gas oil, diesel fuel and fuel oil  
Grade F-12. It was required to develop a combustion  
chamber which could operate on medium and heavy liquid  
fuels at ratings of  $4 \times 10^6$  to  $13 \times 10^6$  kcal/m<sup>2</sup>hour atm  
at a pressure of 3-5 atm, an air temperature of 160 to  
230°C, outlet gas temperatures of [450 to 750°C], with a  
combustion efficiency of 98%. A simple sectional  
drawing of the combustion chamber is given in Fig 1  
and its construction is briefly described. The  
dimensions of the swirler and of the annular gap  
between the body of the chamber and the flame tube were

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SOV/96-59-2-5/18

A. Highly Rated Gas Turbine Combustion Chamber for Medium and Heavy Liquid Fuels

chosen to give an air speed in them of about 40 to 50 m/sec under normal conditions. The fuel was atomised by a nozzle fitted in the centre of the swirler. The arrangements made to measure the experimental conditions are described. The combustion chamber aerodynamics were studied in some detail on models and full scale examples. The gas velocity distribution in the combustion chamber is described and graphs are plotted in Fig 2. A special feature of the velocity distribution with the conical swirler used is that there is a central flow of air towards the swirler, that is, in the opposite direction to the main flow. This carries hot gas to the base of the flame, improving its stability and heating the fuel. The flame did not break away from the swirler, even when the amount of air supplied was more than 10 to 15 times that required for combustion. The reverse gas flow was highest with high air speeds at outlet from the swirler and high angles of swirl. Consideration of the air and fuel flows, on the basis of the curves given in Fig 2, indicates

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80V/96-59-2-5/18

# A Highly Rated Gas Turbine Combustion Chamber for Medium and Heavy Liquid Fuels

that they are mixed continuously over the length of the swirler and particularly towards the outlet. With this type of conical swirler the high axial velocity gradients ensure mixture formation and combustion of medium and heavy fuel over a comparatively short length of the combustion chamber. Operating tests on a full-scale combustion chamber showed that the total hydraulic losses of the chamber are 4 to 5% of the available head at the inlet to the combustion chamber. If the blade angles in the swirler are reduced and the air speed is cut down the hydraulic losses can be reduced to 3 to 3.5%. Burner tests were made with gas oil, diesel fuel and heavy fuel oil grade F-12 of viscosity 2.7 degrees Engler at 75°C and 1.8° Engler at 100°C. The fuel oil was heated to a temperature of 70 to 100°C before burning but the other fuels were not heated. The main properties of the fuels are stated. With the lighter fuels the volumetric loading on the chamber lay in the range  $5 \times 10^6$  to  $18 \times 10^6$  kcal/m<sup>3</sup>hour atm.

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SOV/96-59-2-5/18

A Highly Rated Gas Turbine Combustion Chamber for Medium and Heavy Liquid Fuels

The combustion chamber operated stably with the excess air factor in the flame tube within the range 1.3 to 2.5. The absence of incomplete combustion products near the end of the chamber shows that there is still some possibility of increasing the thermal loading at the given pressure and volume. It will be seen from the gas analysis curves given in Fig 3 that products of incomplete combustion were not observed under any conditions. It will be noticed that the excess air factors are uniform over the entire central section of the flame tube when the conical swirler is used and this promotes complete combustion of the fuel. This shows that one of the main disadvantages of the flat swirler, such as is illustrated in Fig 4, has been overcome. The most difficult operating conditions occurred at light loads. When the combustion chamber with conical swirler operated with outlet gas temperatures of 460°C and less the mean excess air factor in the volume of the flame tube reached 2.5. With a pressure of 35 atm on the nozzle 43% of the fuel was in drops of

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SOV/96-59-2-5/18

A Highly Rated Gas Turbine Combustion Chamber for Medium and Heavy Liquid Fuels

100 to 180 microns. However, combustion remained very satisfactory; there was no coke formation or smoking. For the tests on fuel-oil minor modifications were made to the combustion chamber and the test conditions are given. With fuel oil also combustion was completed in the first section of the chamber and the gas analysis curves given in Fig 3 show that combustion was complete in all the tests. However, in the fuel oil tests there were some losses because of mechanical under-combustion with coke formation. The gas temperature at the central part of the end of the combustion chamber near the mixers reached 1,400°C on full load tests. After the tests the whole chamber was clean except for a thin layer of soot on the cone of the flame tube and very light deposits on the outlet edges of the swirler. In later tests, the first slot delivering air to the flame tube immediately beyond the conical part was fully closed. This caused some reduction of the amount of excess primary air and consequently increased the gas

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5/18

SOV/96-59-2-5/18

# A Highly Rated Gas Turbine Combustion Chamber for Medium and Heavy Liquid Fuels

tube rose from 500 to 600°C to 600 - 690°C. A curve of the maximum mean temperature of the flame tube as function of the mass air speed in the annular gap of the chamber is given in Fig 8. Over the air speed range of 20 to 45 kg sec/m<sup>2</sup> the flame tube temperature ranged from 420 to 470°C. In these tests the flame temperature ranged from 1240 to 1460°C and the air temperature given in Fig 9 that the temperature of the outer frame of the combustion chamber depends mainly on the air temperature and for example, with air temperature of 70°C the frame temperature does not exceed 120°C whilst with an air temperature of 160°C the wall temperature is 170°C and with the greatest air temperature of 230°C the frame temperature is 250°C. It is concluded that combustion chambers of this design can be used for gas turbines covering a wide range of outputs by altering the number and size of the chambers.

Card 8/9

L 65014-65 EWT(m)/EWP(w)/EWP(f)/EWP(v)/T-2/EWP(k)/ETC(m) WW/EM  
 ACCESSION NR: AP5022029 UR/0286/65/000/014/0099/0099  
 621.438.082 25  
 B  
 AUTHOR: Svyatskiy, Z. M.; Polyatskin, M. A.; Shul'man, V. L.  
 TITLE: Flame-reversal tube in a sectional combustion chamber for gas turbines. Class 46, No. 173070  
 SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 14, 1965, 99  
 TOPIC TAGS: flame reversal tube, sectional combustion chamber, gas turbine component, flame transfer  
 ABSTRACT: An Author Certificate has been issued for a flame-reversal tube in a sectional combustion chamber for gas turbines. For increased efficiency and reliability in flame transfer, the tube is connected with the fuel-feed pipes to its internal cavity for ignition. (see Fig. 1 of Enclosure). Orig. art. has: 1 figure. [LB]  
 ASSOCIATION: none

Card 1/3

L 69014-65

ACCESSION NR: AP5022029

SUBMITTED: 28Oct63

ENCL: 01

SUB CODE: PR

NO REF SOV: 000

OTHER: 000

ATD PRESS:

Card 2/3



L 65014165

ACCESSION NR: AP5022029

ENCLOSURE: 01

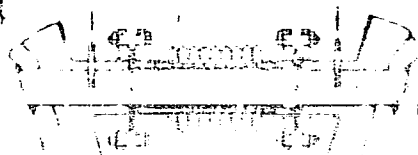


Fig. 1. Flame-reversa.

12.1.1.1.

Carac 3/3 *YMLP*

(A) L 11058-66 EPA/EWP(f)/T-2/ETC(m) WW. SOURCE CODE: UR/0286/65/000/024/0126/0126  
 ACC NR: AP6002956  
 INVENTOR: Kovalevskiy, M. M.; Gorshkov, V. N.; Zatkovetskiy, G. N.; Kunkov, P. A.;  
 Shul'man, V. L.; Bantikov, Yu. S.; Svyatskiy, Z. M.

ORG: none

TITLE: Mixer and exhaust duct for a gas-turbine combustion chamber. Class 46,  
 No. 177231

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 24, 1965, 126

TOPIC TAGS: gas turbine engine, gas turbine, combustion chamber, turbine cooling

ABSTRACT: The proposed mixing chamber and exhaust duct is equipped with an external screen forming an annular clearance for feeding cooling air (see Fig. 1). The air then enters the mixing chamber through openings in its walls. To ensure a more uniform cooling of all combustion chamber components, the clearance is divided by a

UDC: 621.438.056—712.8

Card 1/2

L 11-058-66

ACC NR: AP6002956

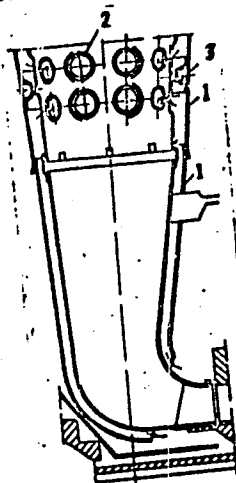


Fig. 1. Mixer and exhaust duct  
1 - External screen; 2 - mixer  
openings; 3 - baffle.

baffle which permits part of the cooling air to enter the chamber directly and the rest in a counter-flow. Orig. art. has: 1 figure. [TN]

SUB CODE: 21/ SUBM DATE: 28Oct63/ ATD PRESS: 4170

Card 2/2

SVYATSKIY, Z.M., kand. tekhn. nauk; SHUL'MAN, V.L., inzh.

Sectional combustion chamber of a stationary gas turbine system.  
Energomashinostroenie 11 no.7:26-29 J1 '65. (MIRA 18:7)

SVYATUKHIN, M.V.

Histopathologic changes in the intercostal lymph nodes in pleurisy and hemothorax. Arkh. pat., Moskva 13 no.6:59-64 Nov-Dec 51.(CML 21:4)

1. Of the Department of Pathological Anatomy (Head--Prof. A.N. Chistovich Colonel Medical Corps), Military Medical Academy imeni S.M. Kirov.

SVYATUKHIN, V.M., professor.

Artificial kidney. Nauka i zhizn' 23 no.6:56 Je '56.

(MLRA 9:9)

(Kidneys, Artificial)

SVYATUKHIN, V.M., professor

Tasks of medical science in the sixth five-year-plan. Sov.zdrav.  
15 no.3:3-7 My-Je '56. (MLRA 9:8)  
(MEDICINE,  
in Russia, in 6th 5-year plan (Rus))

*SVYATUKHIN, M.V.*  
BODAREV, A.A.; SVYATUKHIN, M.V.

Method for producing a pyrogenic polysaccharide from *Proteus vulgaris*.  
Biul. eksp. biol. i med. 44 no.10:119-121 0 '57. (MIRA 11:2)

1. Predstavlena deystvitel'nyy chlenom AMN SSSR I.V. Davydovskim.  
(PROTEUS VULGARIS,  
isolation of pyrogenic polysaccharides (Rus))  
(PYROGENS, preparation of  
from *Proteus vulgaris* (Rus))



SVYATUKHIN, Vladimir Mikhaylovich

[Essays on the diagnosis of surgical diseases] Ocherki po  
diagnostike khirurgicheskikh zabolevanii. Moskva, 1959. 119 p.  
(DIAGNOSIS, SURGICAL) (MIRA 13:9)

SVIATUKHIN, M.V.; SHILOV, V.M.; BODAREV, A.A. (Moskva)

Effect of natural dextran and of pyrogenic polysaccharide from  
Proteus vulgaris on survival of white mice following total-body irradiation. Biul. eksp. biol. med. 47 no.5:72-76 My '59. (MIRA 12:7)

1. Predstavlena deystvitel'nym chlenom AMN SSSR I.V. Davydovskim.  
(DEKTRAN, eff.  
on survival of x-ray total-body irradiated mice (Rus))  
(PROTEUS VULGARIS,  
pyrogenic polysaccharides, eff. on survival of x-ray total-body irradiated mice (Rus))  
(PYROGENS, effects,  
proteus vulgaris pyrogenic polysaccharides, on survival of x-ray total-body irradiated mice (Rus))  
(ROENTGEN RAYS, effects,  
total body irradiated mice, eff. of dextron & Proteus vulgaris pyrogenic polysaccharide on survival (Rus))

SVYATUKHIN, M.V.; BODAREV, A.A.; VIUNSKOVSKIY, D.N.

Effect of dextran on the development of edema in burned tissues and  
on hemoconcentration in extensive burns. Probl. gemat. i perel. krovi  
5 no. 4:39-44 Ap '60. (MIRA 14:1)  
(BURNS AND SCALDS) (DEXTRAN)

SVYATUKHIN, M.V.

Effect of cortisone on the course of experimental injuries to the  
skin by  $\beta$  rays. Probl. endok. i gorm. 6 no. 4:3-8 J1-Ag '60.

(MIRA 14:1)

(SKIN—WOUNDS AND INJURIES) (BETA RAYS—PHYSIOLOGICAL EFFECT)  
(CORTISONE)

SHRAYBER, M.I.; SVYATUKHIN, M.V.; SHULOV, V.M.; DOGGINA, M.I.

Use of polymer film for local treatment of burns. Eksper. khir.  
anest. 7 no.4:69-65 J1-ag '62. (MIRA 17:5)

1. Iz oshogovogo otdeleniya Instituta khirurgii imeni  
A.V.Vishnevskogo (dir. - deystvitel'nyy chlen AMN SSSR  
prof. A.A.Vishnevskiy) AMN SSSR.

SVYATUKHIN, M.V.

Elastomogenic action of ionizing radiations. Vest. AMN SSSR  
18 no.3:39-43 '63. (MIRA 17:10)

SVYATUKHIN, M.V. (Moskva)

Leukemia and ionizing radiation. Arkh. pat. 27 no.2:6-13 '65.

(MIRA 18:5)

1. Laboratoriya luchevykh faktorov kantserogeneza (zav. - prof. M.V.Svyatukhin) ot dela kantserogennykh **agentov** zav. - deystvitel'nyy chlen AMN SSSR prof. L.M.Shabad, Instituta eksperimental'noy i klinicheskoy onkologii (dir. - deystvitel'nyy chlen AMN SSSR prof. N.N.Blokhin) AMN SSSR.

L 21243-66 EWT(m)

ACC NR: AP601/656

SOURCE CODE: UR/0241/65/010/008/0047/0055

AUTHOR: Svyetukhin, M. V.; Sorokina, Yu. D.

ORG: Laboratory of the Radiation Factors of Carcinogenesis /headed by Professor M. V. Svyetukhin/, Institute of Experimental and Clinical Oncology, AMN SSSR, Moscow  
(Laboratoriya luchevykh faktorov kantserogeneza Instituta eksperimental'noy i klinicheskoy onkologii AMN SSSR)

TITLE: Restorative postradiation processes and their relation to radiation leukosis

SOURCE: Meditsinskaya radiologiya, v. 10, no. 8, 1965, 47-55

TOPIC TAGS: x ray irradiation, radiation injury, radiation biologic effect

ABSTRACT: Since the thymus is considered a major factor in the mechanism of the genesis of lymphatic leukosis as a result of irradiation, the authors present the results of experimental observations of the restorative processes in the thymus of mice subjected to whole-body x-irradiation with lymphatic leukosis as a corollary. It is shown that, following the whole-body irradiation of the mouse thymus, the resulting extensive destruction of its lymphoid cells is gradually superseded by a process of recovery; the smaller the radiation injury, the earlier this process begins and the faster it proceeds. Thus, after irradiation with a dose of 150 r the recovery rate of the lymphoid cells significantly exceeds the growth rate of the radiation-induced lymphomas. After irradiation with a dose of 540 r the recovery rate is either the same as

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UDC: 616-006.446-092.9-02:616-001.267-092



L 21943-66

ACC NR: AP6014656

or slightly higher than the growth rate of the lymphomas. After repeated irradiation (four doses of 200 r each, or 800 r) the recovery proceeds at a slower rate (1 1/2 to 2 months from date of last irradiation), compared with the normal 10-day recovery period of the thymus. Further, it is shown that combining whole-body irradiation with urethane anesthesia not only compounds the destructive changes in the thymus but also retards the restorative processes. Particularly indicative in this sense is the delayed rise in the mitotic coefficient. Orig. art. has: 8 figures and 2 tables. [JPRS]

SUB CODE: 06 / SUBM DATE: 10Jan65 / ORIG REF: 002 / OTH REF: 003

Card 2/2 *OK*

SVYATUKHIN, V.I.

Using group of dynamometers for power measurements. Izv.tekh.  
no.1:74-75 Ja-F '57. (MIRA 10:4)  
(Dynamometer)

SVYATUKHIN, V.V.

FIGOLINA, Z.M.; SVYATUKHIN, V.V.

Optical and X-ray investigation of cracking surfaces of synthetic  
corundum. Trudy Inst.krist. no.8:299-308 '53. (MLRA 7:5)  
(Corundum)

KUSHNER, S.G., inzh.; SISTER, G.A., kand. tekhn. nauk; SVYATUKHIN, V.V., inzh.

Designing nitrogen fertilizer plants for processing coke gas.  
Prom. stroi. 42 no.12:30-34 D '64. (MIRA 18:3)

1. Dneprodzerzhinskiy filial Gosudarstvennogo nauchno-issledovatel'-  
skogo i proyektnogo instituta azotnoy promyshlennosti i produktov  
organicheskogo sinteza.

SVYATUCHINA, O. A.; \*ZHABOTINSKIY, Yu. M. and SHUSTROV, A.K.

"Particular Features in the Multiplication of Toxoplasma in the Central Nervous System and the Formation of Pseudocysts"

Voprosy toksoplazmoza, report theses of a conference on toxoplasmosis, Moscow, 3-5 April 1961, by Inst Epidemiology and Microbiology im. N. F. Gamaleya, Acad. Med. Sci USSR, Moscow, 1961, 69pp.

\* IEM im Gamaleya AMN SSSR, Moscow

SVYATUKHINA, G.A. (Leningrad); SMIRNOVA, Z.A. (Leningrad); TARASOVA, N.N. (Leningrad); SHVEDSKAYA, A.C. (Leningrad)

Toxoplasmosis in a 3<sup>1</sup>/<sub>2</sub>-month-old infant. Arkh.pat. 27 no.7:78-79  
'65. (MIRA 18:8)

1. Laboratoriya patologii nervnoy sistemy (zav. - prof. Yu.M. Zhabotinskiy) otdela patologicheskoy anatomii (zav. - akademik N.N.Anichkov) Instituta eksperimental'noy meditsiny AMN SSSR; Patologoanatomicheskoye otdeleniye (zav. - Z.A.Smirnova) i detskoye otdeleniye (zav. N.N.Tarasova) Leningradskoy Oblastnoy klinicheskoy bol'nitsy; kafedra psikhii Voenno-meditsinskoy ordena Lenina akademii imeni S.M.Kirova (zav. - prof. A.A.Portnov).

WENTHURST, G. V.

"Pathomorphology of Japanese Encephalitis (Experimental Morphological Investigation)." Cand Med Sci, Inst of Experimental Medicine, Acad Med Sci USSR, Leningrad, 1954. (EZhBirol, No 4, Feb 55)

SO: Sum. No. 631, 26 Aug 55 - Survey of Scientific and Technical Dissertations  
Defended at USSR Higher Educational Institutions (14)

SVYATUKHINA, O. V.

"On Mastopathy and Its Relation to Cancer of the Mammary Glands."  
Cand Med Sci, Central Inst for the Advanced Training of Physicians,  
21 Sep 54. (VI, 10 Sep 54)

SO: Sm 432, 29 Mar 55



ESKIN, I.A.; MIKHAYLOVA, N.V.; SVYATUKHINA, O.V.; CHEBAN, M.E.

Estrogen in the blood in women with breast cancer. Biul. eksp.  
biol. i med. 38 no.11:58-62 N '54. (MLRA 8:1)

1. Iz otdela eksperimental'noy biologii (zav. prof. I.A.Eskin)  
Vsesoyuznogo instituta eksperimental'noy endokrinologii (dir. prof.  
Ye.A.Vasyukova) i Gosudarstvennogo onkologicheskogo instituta imeni  
P.A.Gertsena (dir. V.V.Gorodilova)

(BREAST, neoplasms,

blood estrogens in)

(BLOOD,

estrogens in cancer of breast)

(ESTROGENS, in blood,

in cancer of breast)

ESKIN, I.A.; KAZHDAN, V.I.; SVYATUKHINA, O.V. (Moskva)

Estriol, estrone, and estradiol in the blood in normal women  
and in breast cancer and mastopathies. Probl.endok. i gorm.  
1 no.6:80-83 N-D '55. (MIRA 12:8)

1. Iz otdela eksperimental'noy biologii (zav. - prof.I.A.Eskin)  
Vsesoyuznogo instituta eksperimental'noy endokrinologii (dir. -  
prof.Ye.A.Vasyukova) i Gosudarstvennogo onkologicheskogo insti-  
tuta imeni P.A.Gertsena (dir. - prof.A.N.Novikov).

(BREAST, neoplasms,

blood estrogens in)

(BREAST, diseases,

blood estrogens in)

(BLOOD,

estrogens, in normal cond. & in neoplastic &  
benign breast dis.)

(ESTROGENS, in blood,

in blood, in breast dis., neoplastic & benign,  
& in normal cond.)

MSKIN, I.A. (Moskva); KAZHDAN, V.I. (Moskva); SVYATUKHINA, O.V. (Moskva)

Amount of 17-ketosteroids and pregnandiol in urine in normal women  
and in breast cancer and other mastopathies. Probl.endok. i gorm.  
2 no.5:57-60 S-O '56. (MIRA 9:12)

1. Iz otdela eksperimental'noy biologii (zav. - prof. I.A.Mskin)  
Vsesoyuznogo instituta eksperimental'noy endokrinologii (dir. - prof.  
Ye.A.Vasyukova) i Gosudarstvennogo onkologicheskogo instituta imeni  
P.A.Gertsena (dir. - prof. A.N.Novikov)

(PREGNANDIOL, in urine,  
in cancer of brest & other breast dis. & in normal cond.  
(Rus))

(STERIODS, in urine,  
17-keto, in cancer of breast & other breast dis. & in  
normal cond. (Rus))

(BREAST NEOPLASMS, urine in,  
17-ketosteroids & pregnandiol (Rus))

(BREAST, diseases  
urinary 17-ketosteroids & pregnandiol in (Rus))

PRESNOV, M.A., PRIGOZHINA, Ye.L., SVYATUKHINA, O.V., TRAPEZNIKOV, N.N.

Second All-Union Oncological Conference, Leningrad, 1958.  
Vest.AMI SSSR 13 no.7:78-88 '58 (MIRA 11:8)  
(ONCOLOGY--CONGRESSES)

CHAKLIN, A.V.; SVYATUKHINA, O.V.; ORLOVSKIY, L.V.

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Intracellular multiplication of Toxoplasma and formation of  
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Anichkov) Instituta eksperimenta'noy meditsiny AMN SSSR i  
kafedry s parazitologiyey imeni akademika Ye.N. Pavlovskogo  
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ordena Lenina akademii imeni S.M. Kirova.

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Across the border. Geog.v shkole 22 no.4:82-85 J1-Ag '59.  
(MIRA 12:11)

(Geography, Economic)



*SV YAZHENINOVA, N.G.*  
**SV YAZHENINOVA, N.G.**

Treatment of periarthrititis of the shoulder joint by injections of novocain solution. Khirurgia, Moskva No.12:66-69 Dec 51. (CML 21:4)

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Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 3,  
pp 91-92 (USSR) 15-1957-3-3071

AUTHOR: Svyazhin, N. V.

TITLE: Staurolite from the Svetlyy Placer Mine in the  
Southern Urals (Stavrolit iz rossypey priiska  
Svetlogo na Yuzhnom Urale)

PERIODICAL: Tr. Sverd. gorn. in-ta, 1956, Nr 26, pp 115-119

ABSTRACT: The region of the Svetlyy mine is almost everywhere  
covered by friable placer deposits up to 10 m  
thick. Gold, pyrite, magnetite, apatite, kyanite,  
staurolite, and other minerals are found in the  
heavy mineral fraction of the placer material.  
Staurolite is the most widely distributed mineral  
in the friable deposits. It occurs in well formed  
and completely unrounded crystals. Many of the  
crystals shattered, but no traces of recrystallization

Card 1/3

15-1957-3-3071

## Staurolite from the Svetly Placer Mine in the Southern Urals

have been found in the fractures. Single crystals attain a size of 1 cm along axis a, 2.5 cm along axis b, and 3.5 to 4 cm along axis c. Only a few crystal forms occur among the single crystals:  $m\bar{1}10$ ,  $c\bar{0}01$ , rarely  $b\bar{0}10$ , and very rarely  $r\bar{1}01$ . The most abundant forms in combinations are  $\bar{1}10$ ,  $\bar{1}001$ , and  $\bar{0}10$ . In simple twins on (031), individuals can hardly be distinguished in appearance and relative dimensions along the a, b, and c axes from single crystals, but there is a somewhat greater development of the (010) face. The author discovered a new systematic pattern of interpenetrating staurolite crystals-- a quadruple form. Three of the individuals grow through each other along (232) forming angles with each other near  $60^\circ$ , but the fourth individual forms an intergrowth with one of the first three along (031) at a  $90^\circ$  angle. The majority of the crystals of staurolite are black or dark

Card 2/3

SVYAZHIN, N. V.

USSR/ Cosmochemistry. Geochemistry. Hydrochemistry

D.

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 11515

Author : Svyazhin N.V., Isakov M.G.

Inst : Sverdlovsk Mining Institute

Title : Biotite-Albite Nephelinolite -- A Variety of Miascite from  
Vishnevogorodskiy Alkaline Massif

Orig Pub : Tr. Sverd. gorn. in-ta, 1956, No 26, 119-122

Abstract : Petrographic description of a new variety of miascite comprising  $\leq 80\%$  by volume of nepheline, 16% by volume feldspars and 3.8% by volume biotite  
Chemical composition of two specimens (in %):  $SiO_2$  48.32; 52.72;  $TiO_2$  0.11;  
0.11; 0.30;  $Al_2O_3$  30.32; 29.9;  $Fe_2O_3$  0.64; 0.84; FeO 1.86; 0.85; MnO 0.05;  
0.042; MgO 0.07; 0.43; CaO 0.38; 1.51;  $Na_2O$  12.95; 9.02;  $K_2O$  4.33; 3.44;  
 $H_2O$  -; 0.24;  $P_2O_5$  0.1; - ; sum 100.28; 99.25. The rock contains veins of  
pure nepheline 0.6 m thick.

1/1

SVYAZHIN, N.V.

Metamorphism of sunstones from Vishnevaya Mountain in the Urals.

Trudy Gor.-geol. inst. UFAN SSSR no. 42:107-116 '59.

(MIRA 14:2)

(Vishnevaya Mountain--Sunstone)

SVYAZHIN, N.V.

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Urals. Trudy Gor.-geol.inst. UFAN SSSR no.56:61-62 '61.

(MIRA 15:7)

(Ural Mountains--Ilmenorutile crystals)

SVYAZHIN, N.V.

Toernebohmite from the Ural alkali province. Zap. Vses. min. ob-va  
91 no.1:97-99 '62. (MIRA 15:3)

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Concentric ~~zonal~~ aggregates of rare earth minerals from the  
alkaline complex in the Vishnevyye Mountains. Trudy IMGRE  
no.9:55-66 '62. (MIRA 16:1)

(Vishnevyye Mountains--Rare earth metals)

FOMINYKH, V.G.; SVYAZHIN, N.V.

Composition of the accessory magnetites and titanomagnetite in  
alkali rocks of the Central Ural Mountains. Dokl. AN SSSR  
155 no. 5:1088-1089 Ap '64. (MIRA 17:5)

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akademikom D.S.Korzhinskim.

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Nelsonite from the Kyshtym region in the Urals. Trudy Inst.  
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'65

Kyschtymite as a variety of bastnaesite. Ibid.:249-252

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alkali massif. Ibid.:277-281 (MIRA 18:12)